



Early Journal Content on JSTOR, Free to Anyone in the World

This article is one of nearly 500,000 scholarly works digitized and made freely available to everyone in the world by JSTOR.

Known as the Early Journal Content, this set of works include research articles, news, letters, and other writings published in more than 200 of the oldest leading academic journals. The works date from the mid-seventeenth to the early twentieth centuries.

We encourage people to read and share the Early Journal Content openly and to tell others that this resource exists. People may post this content online or redistribute in any way for non-commercial purposes.

Read more about Early Journal Content at <http://about.jstor.org/participate-jstor/individuals/early-journal-content>.

JSTOR is a digital library of academic journals, books, and primary source objects. JSTOR helps people discover, use, and build upon a wide range of content through a powerful research and teaching platform, and preserves this content for future generations. JSTOR is part of ITHAKA, a not-for-profit organization that also includes Ithaka S+R and Portico. For more information about JSTOR, please contact support@jstor.org.

THE JOURNAL OF PHILOSOPHY

PSYCHOLOGY AND SCIENTIFIC METHODS

VALUE AND POTENTIALITY

HENRI POINCARÉ¹ stood for the thesis that "scientific fact is nothing but brute fact translated into a convenient language," and further that "all that the scientist creates in his fact is the language in which he enunciates it"; and J. T. Merz² introduces us to that part of his monumental work that deals with philosophy by the statement that "more even than in science, we may say that in philosophy progress consists in finding an appropriate verbal expression, or, having found it, in conveying to our readers the clear definition of the meaning we desire to attach to it." If there is any truth in these opinions, then, it follows that the reconsideration of the terms in which any concept is defined is important, and the enunciation of a more clear or more convenient definition, a real progress.

Within the whole realm of philosophy, it seems to the writer, few concepts have suffered from inept formulation more than the concept of value, and this not because of peculiar difficulty concerning fact, but because of the interests of theologians and metaphysicians who have, for the most part, either reduced it to an abstraction or deduced it as corollary to an already accepted system. Metaphysical conceptions of value,³ such as those of Professor Münsterberg and Mr. Russell, only become intelligible, if at all, when one is ensconced in the system; and psychological conceptions, such as are found among the German philosophers, and, in less objectionable form, among the realists and some of the pragmatists, carry with them many obscure connotations from psychology. Indeed, the psychologists, in this instance as in many others, are in a more difficult position than the metaphysicians, for in addition to the metaphysical assumption that the reality of value has something to do with mind, they are beset with difficulties due to the vacillation of their science between behaviorism, paral-

¹ "The Value of Science," Pt. III., sec. 3.

² "History of European Thought in the Nineteenth Century," Vol. III., page 4.

³ J. F. Dashiell, "The Philosophical Status of Values," New York, 1913 (thesis).

lelism, and spiritualism to such a degree that the "S O S" call is sent to-day rather from psychology to philosophy than in the counter direction.

To examine the weaknesses of these contemporary theories systematically would be a task of such magnitude that to attempt it here would be to remain walled up like the five kings in the cave of Makkedah, while the victorious psychologists and metaphysicians sweep the field. In consequence, this paper will merely attempt to restate the facts of value with as much concreteness and independence of the connotations of any system as the nature of the case permits. The result, although aiming at neither agreements nor disagreements with accepted positions, will doubtless attain both, but it desires neither credit nor discredit therefor, but rather seeks criticism on the ground that it successfully "walks around the idea and looks at it from all sides"—to borrow Professor Dewey's characterization of one of his analyses.

That the concept of potentiality might be the key to a useful discussion of the facts under consideration is suggested by the root meaning of the word *value*, for the value of an object, by derivation, is that of which the object is capable, the development of its potentialities. But first it is necessary to review the meaning of potentiality.

A potentiality of an actual thing is, I believe, generally accepted to be nothing but the thing itself in relation to some transformation, either of itself or of its environment, that might be brought about under some conditions, at some time, through the actuality of the thing. The group of conditions necessary for the realization of any specific effect are, each of them, potential contributors to its realization, but each demands the cooperation of the others before it can become an actual cause, and some one of these factors is generally seized upon as the effect "in potentiality." But which? They can not all be so chosen, for with them all given the effect is at once actual, although this fact is often obscured or denied when such factors as space and time are overlooked. And such oversight is not justifiable, for if cause is defined in the usual manner as the indispensable condition of an event, space and time are certainly cooperating causes. In such stock examples as "the egg is a potential chicken," "a pile of bricks is potentially a wall," "steel is a potential knife," it is the material cause to which the potentiality is accredited. This is the result of picking out a striking factor in the situation which impresses us by some empirically intimate relation to the effect and letting that factor stand as the condition *par excellence* of the effect. But we are not always uniform in this usage, and, indeed, in many instances, its applicability is not obvious. Thus the potentiality of old age may be said to lie in continued existence, and

the potentiality of success in constant application, and here it is hardly a question of material cause, in a modern nomenclature, but of what is merely the "warmest" causal factor. But even this restriction is somewhat arbitrary and, although it is, perhaps, contrary to every-day usage, it is surely not meaningless to ascribe the potentiality of an effect to any of its causal factors. Thus space and time, as well as the egg, are potential chickens, for they are indispensable conditions of the chicken-realization. It may be this is turning them into material causes. Bergson does this in the case of time, and there may be good ground, in the dynamic changes that result from mere proportional increase in spatial magnitude, to believe something analogous is true in the case of space. But at any rate, natural choices in this matter are expressions of human interest rather than of the ontological character of the thing chosen.

The potentialities of an object in some sense constitute its values, but to identify the two terms would be to blur terms better kept apart, provided a suitable differentia can be found. A frequent procedure is to assume that potentialities become values through the selective activity of some human interest. Thus the egg is valuable because of its chicken-potentiality, or the steel because of its knife-potentiality, *when* somebody wants that chicken or that knife. This is a view that makes the distinction between potentiality and value depend neither on a difference in the objects nor on the processes of transformation they are to initiate or undergo, nor on the end to be realized, nor on any relation between these things, but only on the attitude with which our thought approaches them, and while it is a very excellent thing to have distinctions of this sort in language—for language has much more to do than to express the mere facts of an objective world, and must often suggest our attitude toward them and the angles at which we approach them—it is unfortunate when the philosopher confuses such distinctions with the ontological status of facts, and, at best, it is a bad thing to accept a subjective differentia of a concept when it is possible to find others less ephemeral and more closely bound up with the nature of things. The human organism is essentially egoistic and lives by making things realize its ends through their potentialities. Consequently it is interested in controllable potentialities and is quick to call them values, but it does not follow that the true nature of value is brought out by such preferences. On the contrary, in a concrete situation, it is not forced or unnatural to say "sunshine has value for the growth of trees and flowers," or "coral polyps for the production of islands," quite regardless whether or no these things are desirable from any human standpoint. And such instances should be adequate to show the undue narrowness of the subjective criterion.

If we examine certain related terms an interesting fact appears. If a thing has value, it is valuable; but in the case of potentiality, there is no correspondingly allied adjective, for "potential" is not related to "potentiality" as "valuable" is to "value"; potential relates to the effect to be realized through the potentiality possessed by something else, but valuable means to possess the value. The potentiality of the egg is in relation to the chicken that may come out of it, but the potential egg is quite a different thing, yet the egg is at once a value and valuable in relation to the chicken. Again, with the assertion that a thing has value, there trembles on the lips the question, how valuable is it? But it is only torturing the meaning of the word to ask of a potentiality, how potential is it? In other words, value relates to the adequacy of a thing to the realization of an effect, whereas potentiality relates to the thing as contributing to the realization, without reference to its adequacy. Adequacy is an objective attribute of the situation in question, and, if value is to be defined in relation to potentiality, we might say that *value is degree of adequacy of a potentiality to the realization of the effect by virtue of which it is a potentiality*, or, put more concretely, *the value of an object consists in the adequacy of its qualities in reference to the realization of a specific effect*. Of course, the degree of such adequacy need not be numerically estimated, and need not be specifically defined, but the possibility of such estimates lies, nevertheless, behind all instances of value. Values are not, then, a subclass of potentialities, for the two concepts are mutually implicative in that the situations in which they arise are identical. They differ in that they refer to different aspects of the situations; potentiality, the factor through which the effect may be realized and value to the readiness of the realization. Nor does the definition mean that value is a relation, for I confess I can find little instruction in such phrases. Value only arises in complex situations where there are relations and is a name for a describable aspect of such situations, but the value is no more the relation than it is the thing, and to try to reduce it to one or the other is a highly unwarranted over-simplification.

But an even more pernicious over-simplification appears when one attempts to lump all values together as subjective or objective. The subjective alternative is given peculiar plausibility because of a confusion due to the differentia of values. Adequacy is easily confused with the feeling of adequacy and interest in that adequacy and, in consequence, value is taken to depend upon the behavior of a conscious subject or at least upon an "organism in the whole organism-environment situation." The latter alternative, to be sure, avoids much of the psychological difficulties in formulating a definition of consciousness, but with the glamor of consciousness gone, the classifi-

eation of *all* values as subjective is hard to understand unless it be the result of exclusive attention to the normative sciences of tradition which deal only with types of value already selected by human interest. But there are values as truly objective as these are subjective, although it should be noted that even this subjectivity is nothing but a special case of objectivity, namely, that objectivity in which a particular object, the organism, plays a leading rôle.

Let us examine a particular case of these subjective values. A sunset charms me to-night, but if I had seen it last night when I had the blues, it would have been repellent. Therefore I say the sunset's value is subjective with respect to its esthetic character. But what does this mean? That the sunset in one environment-situation contributes to the realization of one effect, and in another, to the realization of quite a different effect. The sunset has remained, by hypothesis, the same sunset, and its potentialities, as sunset, are unchanged, but my organism—in both cases the environment—was first in one state and then in another and its potentialities changed accordingly, and to call the esthetic value subjective refers merely to this fact. In other words, the difference between the values called subjective and those called objective is that while the latter may reside in the potentialities of one object or of a group of objects, of which the organism is not one, the former demand at least a pair of objects of which the organism must be one and the primary variable of the group. Ontologically, subjective values are a sort of objective values differentiated by the fact that an organism plays a leading part in their variation.

It happens that organisms plus environments constitute the necessary conditions for the realization of a large number of effects most interesting to human beings, and as a change in either the organism or the environment modifies the character of those effects, we seek to discover whether it is the organism or the environment that is primarily responsible in particular situations; that is, to observe which is, as a value, the greater. But we can not express this situation well by attributing subjective value to an objective part of the complex, by calling the esthetic value of the sunset subjective, without causing confusion of thought. Indeed, it may well be that the peculiar lack of interest in esthetics, and its peculiar unsucccess among philosophical studies, is rooted in just this confusion. If the concrete expression should be that an effect-value in a certain situation is determined by an organism through its major contribution to the realization of that effect, the fact that a certain object possesses esthetic value for me is not so much a comment on the character of the object as on my own condition and the possession of a certain sense of beauty becomes an indication of the life status of the possessor.

If we grant that a certain situation requiring organic cooperation for its attainment is desirable,—and such an admission must always be an hypothesis based upon anticipatory experiments in the thought of an individual,—the problem of the normative sciences becomes, what sort of an environment and organism would be adequate to attain it? And being practically interested, we limit ourselves to an attainable environment and possible modifications of our organism in approximation to the desired result. And there is always the corollary problem, how are these modifications of the organism and the environment to be brought about? The scientific study of such questions involves, of course, a selection from all values of those subjectively interesting, but not necessarily of exclusively subjective values, even in the sense in which the subjective is a species of the objective. For even the assumption of the desired end, however socialized the selecting individual may become, is only an expression of organic fact.

We have yet to ask, does our definition imply that there are no absolute values? The problem of the absolute or relative character of value is often confused with that of their subjectivity or objectivity. If this identification be accepted, the above account is sufficient to show that there are values wholly objective, or absolute, and values, in a sense, subjective, or relative. But the point of the distinction of the absolute and relative is not kept by this identification, for “absolute” intends to mark out an abiding standard for reference. An effect, through the potential realization of which a value exists, is the standard, and such effects, as we have seen, may be independent of an organism or dependent upon one, but it is at least dubious to assume that the non-organic in relation to effects is eternal, while the organic is transitory. The one may be relatively more abiding than the other, but an eternal value could only appear in a world where

“Change may come not till all change end.”

Such may be the world of a philosophic absolute being, but the study of concrete values seems to give no evidence of such a world, however glibly values may be deduced when such a world is once assumed.

But absolute is also taken to mean (1) independent of any limitation, (2) finished or perfect, and (3) capable of being conceived by itself alone, and it is *à propos* to inquire whether in any of these senses, also, there may be absolute values.

In the first instance, it is only value as an abstraction that may be absolute, for any concrete instance of value is a value limited by the potentialities of the thing possessing value. Thus the problem of the reality of absolute value in this sense is the problem of the reality

of abstractions which introduces logical considerations beyond the scope of this paper, but I suspect that if the abstractions are sufficiently purified to be absolute, they may turn out to be like the coins of M. Anatole France's needy knife-grinder from which have been effaced all images, and which, because they contain nothing English, French, or German about them any more, are no longer worth five shillings, but are of "inestimable value and their circulation is extended infinitely." Such abstract values may be glorious, but they are hardly interesting.

The first sense of absolute is near the third, the absolute as that which can be conceived through itself alone, but now it is the concrete sense of value that may be absolute, and the abstract that is relative, for abstractions are conceivable only through the concrete from which they are abstracted, but a concrete value, the value of a glass of water to satisfy my thirst at the present time, is surely conceivable without the aid of extraneous fact and, therefore, conforms to the condition laid down for absolute value. The plurality of the facts is no slur upon the absoluteness of the value, for the conception is really thirst-satisfying-glass-of-water-value, in which the facts are all incorporated.

In the second sense, as perfect, values may also be absolute, whether concrete or abstract, and, indeed, every object must be possessed of some absolute value in this sense, for in so far as it possessed uniqueness it has some potentiality possessed by no other object, and is the perfect possessor of the corresponding value, in the sense of possessing it accurately and adequately. This perfection is, of course, hardly spectacular. It means merely that the object-situation from which the definition of the value is derived lives up to the definition obtained from it. The distinction is only of importance when coupled with some theory of uniqueness and individuality such as idealism formulates regarding its Absolute Being.

The problem of absolute value is also sometimes confused with that of intrinsic and extrinsic value, the former being classified as absolute, the latter as relative. The distinction is based upon a specific relation between the potentiality of the thing valued and the effect with respect to which it has a value. If the effect appears as a development of the thing itself, or as guaranteed by the thing itself with the addition of such factors as space and time alone, the value is called intrinsic or absolute. Thus the egg as a potential chicken, or gold as a desirable medium of exchange, are intrinsic or absolute values, but the egg, as a chicken dinner, or a banknote as a certificate of deposited gold, are only extrinsically, or relatively valuable. The dividing line is, however, not always easy to draw, and the intrinsic is sometimes identified with the object's character as representative

of a class in the sense that a parsnip may be intrinsically of great value as a parsnip, but extrinsically of small value as an article of food.

The concept of value has now been reviewed in its most significant aspects, but before leaving the discussion there is still one form of the definition of value that must be commented upon, the definition of value in terms of purpose. If the present use of potentiality as a starting-point is accepted, it must appear that such definitions involve a *hysteron proteron*, or at least that they beg the question of the subjectivity of values unless the concept of purpose be given some cosmic significance that expresses a hope of the theologian rather than an induction of science.

In the first place, if we turn to the question of logical priority, we find that it is quite unintelligible to speak of purpose without the presupposition of something purposed, but in order that there be such a thing, there must be in our environment potentialities looking toward the realization of the thing. Further, there must also be potentialities of modifications in the organism which, taken in conjunction with this environment, seem to guarantee its actuality. The recognition of this environment-organism interaction is the recognition of a value of the type we have called subjective, and pleasurable or unpleasurable reaction to such perceived values is that selection or rejection of them that we call purpose. In other words, purpose does not generate values, but purpose is itself a reaction of an organism in a world of values whereby some of them are selected or rejected because of our feelings toward the effects with respect to which they are values. Take the purposive act of looking at a watch to learn the time, as an example. The watch, the pocket, the hand, each has many values; the watch, with respect to the pawnshop, as a missile; the pocket as a storehouse for articles, as a place to put the hand when embarrassed; the hand as a means of running a typewriter, etc. Being in a state of unrest, it is perceived that certain of the watch-hand-pocket values in conjunction with the present organic condition can lead to a state of peace devoutly to be wished, and the selection of these requisite values is the purposing of the action through which the end is realized. Purposive action, then, presupposes values, but doubly selected ones, for in the first place, the selected values must be subjective, and in the second place, desirable; and purpose is only possible because we live in a world where there are objective as well as organic potentialities generative of values amongst which we can select for the sake of realizing effects which are somehow presented to us as desirable in anticipation.

There are also certain interesting interpretations of consciousness resulting from this analysis of value in terms of potentiality, as well

as certain comments on the division and nature of the normative sciences that should be developed, but to enter upon this here would extend this paper unduly, and therefore they must be left until a later date. Our problem was primarily one of the clarification and precision of language, but it is hoped that it has not been wholly unilluminating as to the status of certain facts. Whatever facts may be, this much is certain; it is only through words that they can enter deeply into our thinking and, therefore, the reconsideration of the meaning of words must be the necessary foundation of sound thinking both in philosophy and in science.

HAROLD CHAPMAN BROWN.

COLUMBIA UNIVERSITY.

PERCEPTION¹

WHATEVER perception may be, it is obviously something that has reference to living organisms. It is a term applied to a phase of organic or living behavior. If, then, we first set out the various fundamental types of behavior characteristic of living organisms, we shall be in a position to find a context for the proper study of perception. Observation discovers three basic types of organic action, *viz*, involuntary, reflex, and voluntary. Involuntary and reflex action are different in that the latter occurs only in connection with a disturbance in the organism's environment, whereas the former continues rhythmically (though with variations) under all conditions. They are alike in that they are practically determinate forms of activity which can be almost as easily foretold as sunrise and sunset.

Voluntary action occurs under conditions so variable that it is impossible to foretell what the behavior of the organism will be. It is evident that we are trying to describe voluntary action in terms of observation from without. Is the description adequate? Is it true that it is impossible to foretell the organism's conduct? It is true, but not true enough. Though we can not say what will be the particular act, we can foretell with fair certainty what the eventual consequences of the act will be. It may seem absurd to say that we do not know the act, but do know its consequences, yet this may in a sense be true. We know the general direction, tendency, or end of the organism's activity, but we do not know its means in each instance. Now what is that direction or end? It seems to be incapable of description in terms more explicit than the self-main-

¹ Read at a fortnightly conference of the officers and students of the department of philosophy of Columbia University, on December 1, 1913.